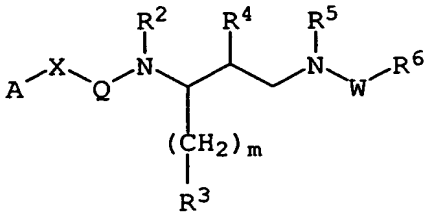
IN THE CLAIMS:

1.-62. (Cancelled)

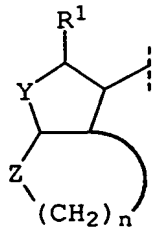
63. (New) A compound represented by a formula:



(I),

or a pharmaceutically acceptable salt, prodrug, or ester thereof, wherein:

A is a group having a formula:



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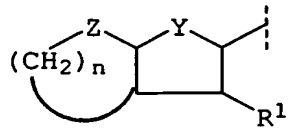

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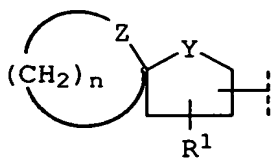
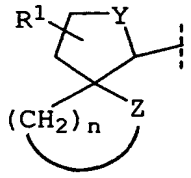


, or



;

R^1 is H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heterocycloalkyl, heterocycloalkylalkyl, heteroaryl, or heteroaralkyl, wherein at least one hydrogen atom is optionally substituted with a substituent selected from the group consisting of OR^7, SR^7, CN, NO_2, N_3, and a halogen, and wherein R^7 is H, unsubstituted alkyl, unsubstituted alkenyl, or unsubstituted alkynyl;

Y and Z, the same or different, are independently selected from the group consisting of CH_2, O, S, SO, SO_2, NR^8, $R^8C(O)N$, $R^8C(S)N$, $R^8OC(O)N$, $R^8OC(S)N$, $R^8SC(O)N$, $R^8R^9NC(O)N$, and $R^8R^9NC(S)N$, wherein R^8 and R^9 each are selected from the group consisting of H, unsubstituted alkyl, unsubstituted alkenyl, and unsubstituted alkynyl;

n is an integer from 1 to 5;

X is a covalent bond, CHR^{10}, $CHR^{10}CH_2$, CH_2CHR^{10}, O, NR^{10}, or S, wherein R^{10} is H, unsubstituted alkyl, unsubstituted alkenyl, or unsubstituted alkynyl;

Q is C(O), C(S), or SO_2;

R^2 is H, C_1-C_6 alkyl, C_2-C_6 alkenyl, or C_2-C_6 alkynyl;

m is an integer from 0 to 6;

R^3 is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl wherein at least one hydrogen atom is optionally substituted with a substituent selected

from the group consisting of alkyl, $(CH_2)_pR^{11}$, OR^{12}, SR^{12}, CN, N_3, NO_2, $NR^{12}R^{13}$, $C(O)R^{12}$, $C(S)R^{12}$, CO_2R^{12}, $C(O)SR^{12}$, $C(O)NR^{12}R^{13}$, $C(S)NR^{12}R^{13}$, $NR^{12}C(O)R^{13}$, $NR^{12}C(S)R^{13}$, $NR^{12}CO_2R^{13}$, $NR^{12}C(O)SR^{13}$, and halogen, and wherein p is an integer from 0 to 5;

R^{11} is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl wherein at least one hydrogen atom is optionally substituted with a substituent selected from the group consisting of a halogen, OH, OCH_3, NH_2, NO_2, SH, and CN; and

R^{12} and R^{13} are independently selected from the group consisting of H, unsubstituted alkyl, unsubstituted alkenyl, and unsubstituted alkynyl;

R^4 is OH, =O (keto), NH_2, or $NHCH_3$;

R^5 is H, C_1-C_6 alkyl radical, C_2-C_6 alkenyl radical, or $(CH_2)_qR^{14}$, wherein q is an integer from 0 to 5, R^{14} is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl radical wherein at least one hydrogen atom is optionally substituted with a substituent selected from the group consisting of a halogen, OH, OCH_3, NH_2, NO_2, SH, and CN;

W is C(O), C(S), or SO_2; and

R^6 is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl radical wherein at least one hydrogen atom is optionally substituted with a substituent selected from the group consisting of halogen, OR^{15}, SR^{15}, $S(O)R^{15}$, SO_2R^{15}, $SO_2NR^{15}R^{16}$, $SO_2N(OH)R^{15}$, CN, $CR^{15}=NR^{16}$, $CR^{15}=N(OR^{16})$, N_3, NO_2, $NR^{15}R^{16}$, $N(OH)R^{15}$, $C(O)R^{15}$, $C(S)R^{15}$, CO_2R^{15}, $C(O)SR^{15}$, $C(O)NR^{15}R^{16}$, $C(S)NR^{15}R^{16}$, $C(O)N(OH)R^{15}$, $C(S)N(OH)R^{15}$, $NR^{15}C(O)R^{16}$, $NR^{15}C(S)R^{16}$, $N(OH)C(O)R^{15}$, $N(OH)C(S)R^{15}$, $NR^{15}CO_2R^{16}$, $N(OH)CO_2R^{15}$, $NR^{15}C(O)SR^{16}$, $NR^{15}C(O)NR^{16}R^{17}$, $NR^{15}C(S)NR^{16}R^{17}$,

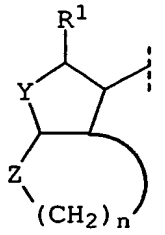
$N(OH)C(O)NR^{15}R^{16}$, $N(OH)C(S)NR^{15}R^{16}$, $NR^{15}C(O)N(OH)R^{16}$, $NR^{15}C(S)N(OH)R^{16}$, $NR^{15}SO_2R^{16}$, $NHSO_2NR^{15}R^{16}$, $NR^{15}SO_2NHR^{16}$, $P(O)(OR^{15})(OR^{16})$, alkyl, alkoxy, alkylthio, alkylamino, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryl, aryloxy, arylamino, arylthio, aralkyl, aryloxyalkyl, arylaminoalkyl, aralkoxy, (aryloxy)alkoxy, (arylamino)alkoxy, (arylthio)alkoxy, aralkylamino, (aryloxy)alkylamino, (arylamino)alkylamino, (arylthio)alkylamino, aralkylthio, (aryloxy)alkylthio, (arylamino)alkylthio, (arylthio)alkylthio, heteroaryl, heteroaryloxy, heteroarylamino, heteroarylthio, heteroaralkyl, heteroaralkoxy, heteroaralkylamino, and heteroaralkylthio, and wherein R^{15}, R^{16}, and R^{17} are H, unsubstituted alkyl, or unsubstituted alkenyl,

wherein, when at least one hydrogen atom of R^6 is substituted with a substituent other than halogen, OR^{15}, SR^{15}, CN, N_3, NO_2, $NR^{15}R^{16}$, $C(O)R^{15}$, $C(S)R^{15}$, CO_2R^{15}, $C(O)SR^{15}$, $C(O)NR^{15}R^{16}$, $C(S)NR^{15}R^{16}$, $NR^{15}C(O)R^{16}$, $NR^{15}C(S)R^{16}$, $NR^{15}CO_2R^{16}$, $NR^{15}C(O)SR^{16}$, $NR^{15}C(O)NR^{16}R^{17}$, or $NR^{15}C(S)NR^{16}R^{17}$, at least one hydrogen atom on said substituent is optionally substituted with halogen, OR^{15}, SR^{15}, CN, N_3, NO_2, $NR^{15}R^{16}$, $C(O)R^{15}$, $C(S)R^{15}$, CO_2R^{15}, $C(O)SR^{15}$, $C(O)NR^{15}R^{16}$, $C(S)NR^{15}R^{16}$, $NR^{15}C(O)R^{15}$, $NR^{15}C(S)R^{16}$, $NR^{15}CO_2R^{16}$, $NR^{15}C(O)SR^{16}$, $NR^{15}C(O)NR^{16}R^{17}$, or $NR^{15}C(S)NR^{16}R^{17}$; or

R^5 and R^6 together comprise a 12- to 18-membered ring comprising at least one additional heteroatom in the ring skeleton which includes the N-W bond of formula (I); and

wherein said compound inhibits a multi-drug-resistant retroviral protease.

64. (New) The compound of claim 63 wherein A has the formula:



65. (New) The compound of claim 63 or 64 wherein:

when R^1 is alkyl, it is a C_1-C_6 alkyl;

when R^1 is alkenyl, it is a C_2-C_6 alkenyl;

when R^1 is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, R^1 is a 4- to 7-membered ring;

when R^7, R^8, or R^9 is unsubstituted alkyl, it is a C_1-C_6 unsubstituted alkyl;

when R^7, R^8, or R^9 is unsubstituted alkenyl, it is a C_1-C_6 unsubstituted alkenyl;

R^3 is a 4- to 7-membered ring;

R^{11} is a 4- to 7-membered ring;

when R^{12} or R^{13} is unsubstituted alkyl, it is a C_1-C_6 unsubstituted alkyl;

when R^{12} or R^{13} is unsubstituted alkenyl, it is a C_2-C_6 unsubstituted alkenyl;

when R^{14} is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, R^{14} is a 4- to 7-membered ring;

when R^6 is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, R^6 is a 4- to 7-membered ring;

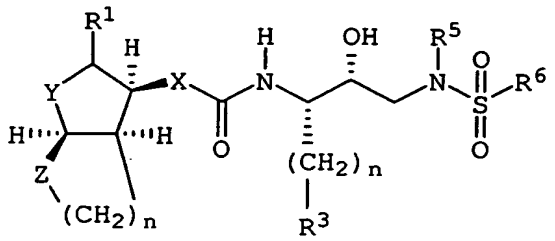
when R^6 is substituted with a substituent that is alkyl, alkylthio, or alkylamino, the substituent comprises from one to six carbon atoms; and

when R^6 is substituted with a substituent that is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, the substituent is a 4- to 7-membered ring;

or a pharmaceutically acceptable salt, a prodrug, or an ester thereof.

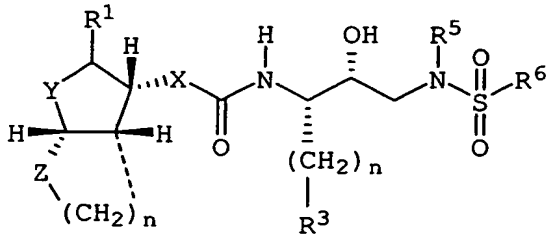
66. (New) The compound of claim 63 or 64 wherein Q is C(O), R^2 is H, and W is SO_2, or a pharmaceutically acceptable salt, prodrug, or ester thereof.

67. (New) The compound of claim 64 represented by a formula:



(IA)

or



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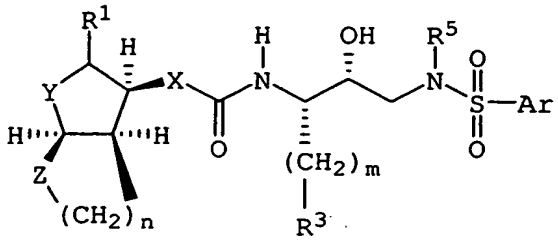
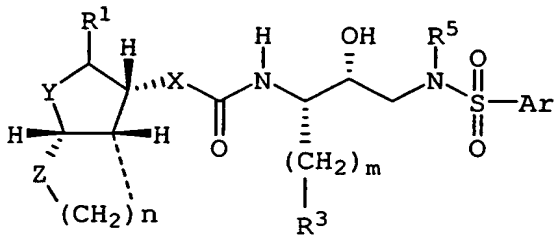
68. (New) The compound of claim 67 represented by a formula:



(IC)

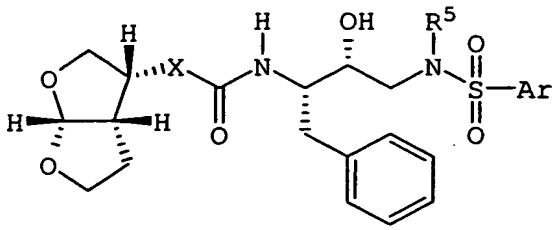
or



(ID)

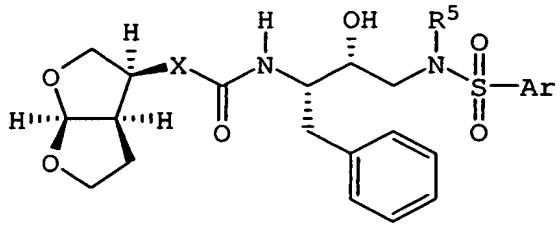
wherein Ar is phenyl, optionally substituted with a substituent selected from the group consisting of methyl, amino, hydroxy, methoxy, methylthio, hydroxymethyl, aminomethyl, and methoxymethyl.

69. (New) The compound of claim 68 represented by a formula:



(IE)

or



(IF)

70. (New) The compound of claim 68 or 69 wherein X is oxygen.

71. (New) The compound of claim 68 or 69 wherein R^5 is isobutyl.

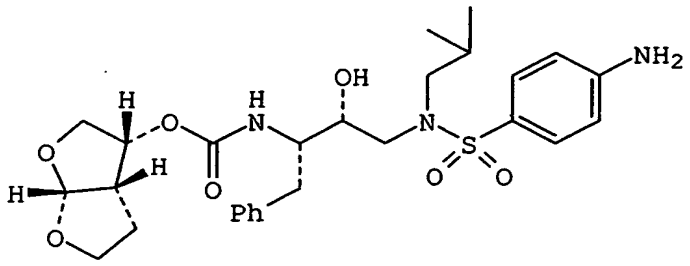
72. (New) The compound of claim 68 or 69 wherein Ar is phenyl substituted at the para position.

73. (New) The compound of claim 68 or 69 wherein Ar is phenyl substituted at the meta position.

74. (New) The compound of claim 68 or 69 wherein Ar is phenyl substituted at the ortho position.

75. (New) The compound of claim 68 or 69 wherein Ar is selected from the group consisting of para-aminophenyl, para-toluyl, para-methoxyphenyl, meta-methoxyphenyl, and meta-hydroxymethylphenyl.

76. (New) The compound of claim 69 represented by a formula



77. (New) A pharmaceutical composition comprising (a) compound of claim 63, 64, 67, 68, or 69 and (b) a pharmaceutically acceptable carrier.